



IEEJ e-NEWSLETTER

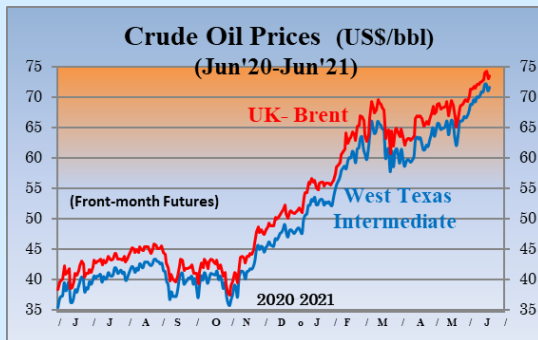
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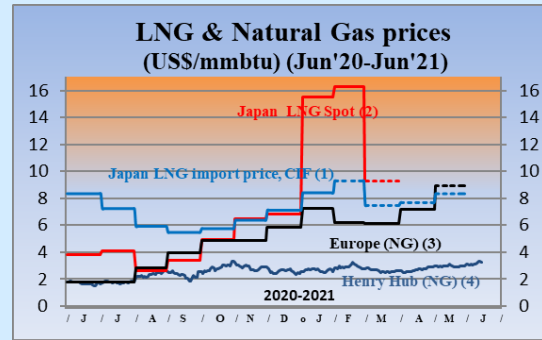
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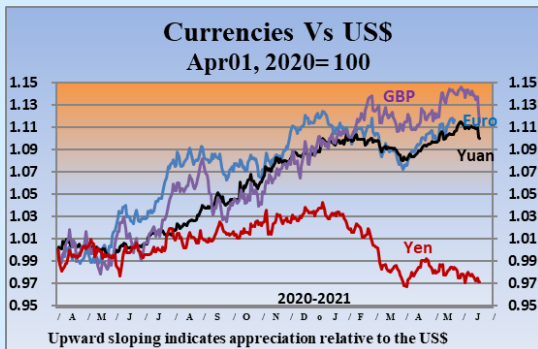
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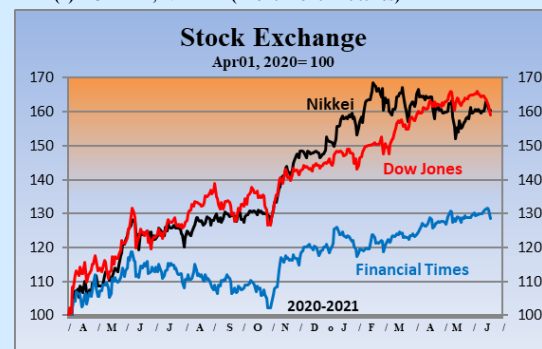
Sources:
(1) DOE-EIA
(2) Investing.com



Sources:
(1) Ministry of Finance "Japan Trade Statistics"
(2) Ministry of Economy, Trade and Industry (arrival month basis)
(3) Estimated by World Bank (Netherlands Title Transfer Facility)
(4) DOE-EIA, NYMEX (Front-month Futures)



Source: x-rates.com



Sources:
(1) Finance. Yahoo.com
(2) Investing.com

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Summary

【Global Monitoring】

1. US: Challenges in Utilizing Distributed Energy Resources

With the reinforcement of climate action, the use of distributed energy resources (DERs) is emerging as a challenge, with measurement becoming a bottleneck.

2. EU: Europe's Decarbonization Policy Affecting Corporate Credit Ratings

Europe's decarbonization strategy is transforming the energy market but also affecting corporate credit ratings. This trend is expected to accelerate, making it essential to reorganize business to meet changes in the market.

3. China: Effectiveness of Cooperation between US-China on Climate Change

Cooperation between the US and China on climate change restarted in April, but its effectiveness is still unclear. Meanwhile, even without progress in cooperation, China is expected to forge ahead with decarbonizing.

4. ME: Major ME Countries Start Re-adjusting Relations

Peace talks between Saudi Arabia and Iran began, with Iraq serving as an intermediary. Violent clashes erupted between Israel and Palestine after Palestinian residents were forced out of their homes.

5. Russia: Deadlocked Confrontation between the Putin Administration and the West

While indicating readiness to cooperate internationally on climate issues, the Putin administration is coming under increasing pressure from the West over crackdowns on government critics and the military use of the Arctic Sea. There is no end in sight.



1. US: Challenges in Utilizing Distributed Energy Resources

Junichi OGASAWARA, Senior Research Fellow
Manager, Electric Power Group
Assistant Director
Electric Power Industry & New and Renewable Energy Unit

On April 28, in his first Congressional address after inauguration, President Joe Biden pledged that he would demand that China rectify unfair trade practices, and that he would address the climate crisis by expanding R&D and investment in clean energy and infrastructure, while creating jobs and maintaining America's lead in technology. He also put stronger emphasis on social security, the income gap, education, hate crimes and LGBTQ (sexual minorities), and public security including gun control. He pointed out that "trickle-down economics" espoused by President Trump had not worked, and proposed rolling back the corporate tax cut and raising taxes on the rich, and using the proceeds to fund domestic initiatives. This triggered criticism among Republicans and others who claimed that heavier corporate taxes would squeeze middle-class jobs and incomes. The pursuit of a policy to "leave nobody behind" offers many hints for Japan, whose middle class has been shrinking or disappearing since the 1990s.

The declared policy to strengthen climate action has made it difficult to invest newly in thermal power, and the use of distributed energy resources (DERs), including for demand response, is emerging as a challenge. At the federal level, Order 2222 was published in September 2020, calling on regions that operate a centralized wholesale electricity market, such as regional transmission operators (RTOs) and independent system operators (ISOs), to enable DERs to participate in the wholesale market through aggregation. The key point is that the minimum requirement for participation was set to 100 kW (including for aggregated resources).

As RTOs and ISOs proceed with studies to utilize DERs to respond to Order 2222, it is becoming clear that the equipment for controlling such resources is a roadblock. For example, the New York ISO requires the installation of telemeters (to enable real-time communication of operational data) in order to participate in the ancillary service market, and has eased the requirements for telemetry accuracy to reduce costs. However, it has become clear that a minimum plant capacity of 0.25 MW is required to stay profitable, assuming the plant operates for 6 hours per day. As such, aggregation is happening slower than hoped, despite efforts by the State of New York to encourage the aggregation of DERs including active sharing of location and equipment information. Similar roadblocks may arise at other RTOs and ISOs, which are also considering making telemetry a requirement.

Regarding next-generation smart-meter specifications in Japan, the general direction has been indicated. By dramatically shortening the measurement interval for effective output from the current 30 minutes to 5 minutes, it has become possible to use smart-meters also for adjustment capacities that have a relatively slow response speed. However, if grid inertia decreases, larger frequency fluctuations are likely to occur more often in shorter time frames, increasing the need for capacities that can respond to higher speeds. Shortening the response time of adjustment capacities is also being discussed in the UK, where grid inertia has decreased. Japan should conduct in-depth discussions on the methods of measurement and telecommunication to utilize small capacities at a shorter response time.



2. EU: Europe's Decarbonization Policy Affecting Corporate Credit Ratings

Ichiro KUTANI, Senior Research Fellow, Manager
Global Energy Group 1, Assistant to Managing Director
Strategy Research Unit

In the past month or two, rating agencies have announced the corporate credit ratings of several energy companies. Fitch Ratings downgraded the long-term issuer rating of France's major electricity and gas company Engie from A to A-. The reason was Engie's decision against the 20-year extension of operation of its two nuclear power plants in Belgium, which highlighted the shortage in the company's reserves for decommissioning costs and resulted in the negative evaluation. Meanwhile, Moody's upgraded the long-term rating of Germany's major electricity and gas company RWE from Baa3 to Baa2. The main reason, alongside RWE's robust business performance in 2020, was that the revenue from its renewable energy business is likely to offset the losses caused by its withdrawal from coal-fired thermal and nuclear power, judging from the strong progress of its renewable energy strategy. For the three major Polish utilities, Fitch Ratings reckoned that the government's proposed spin-off of coal-fired power plants into a separate legal entity will support the companies' credit ratings, though the ratings were not changed this time.

While reasons for changing ratings vary, such changes apparently continue to be based strictly on business performance and growth potential. However, emissions-generating businesses are clearly considered a future risk in Europe which is pushing vigorously toward decarbonization, and how a company deals with such risk is becoming one of the factors for assessing its growth potential. The evaluation of the Polish utilities is one such example. The companies in the above examples are all utilities, many of which are rooted in their local communities and therefore are susceptible to changes in the European market. These companies will have to reshape their business in line with changes in the market in order to survive.

On April 21, the European Commission adopted a sustainable finance package which includes the EU Taxonomy Climate Delegated Act. The package includes a proposed directive for improved disclosure of corporate information related to sustainability. A company's decarbonization strategy and actions are expected to have a stronger impact on its credit rating going forward.

In Japan, the debate on the new Strategic Energy Plan is entering the most important phase. According to a document from the Ministry of Economy, Trade, and Industry, the European Commission analyzed possible scenarios for achieving various 2050 reduction targets (varying from 80 to 100%) back in 2018. In some scenarios, renewable energies account for 81–85% of the 2050 power mix, including 65–72% from solar PV and wind power. It is extremely challenging, both technically and economically, to establish a feasible power system, around 70% of whose output fluctuates with natural conditions. Meanwhile, in the UK, the Committee on Climate Change released an outlook in 2019 that renewables, mainly wind power, will account for 57% of the power mix in 2050. While variable renewables account for nearly 60% in this outlook as well, it has a relatively more balanced supply composition than the EU, as roughly 40% of the variable renewables are thermal power with CCS, nuclear, hydropower, and biomass, whose output is adjustable. Setting ambitious long-term targets is important for urging society to change, but it is also important to underpin their feasibility in policy discussions. There are high expectations for the new Strategic Energy Plan as discussions reach their final stage.



3. China: Effectiveness of Cooperation between US-China on Climate Change

Li ZHIDONG, Visiting Researcher
Professor at Graduate School
Nagaoka University of Technology

On April 22, President Xi Jinping attended the virtual Leaders Summit on Climate hosted by US President Joe Biden and called on the US to work together to conserve and improve the Earth's environment. Just before the Summit, on the 18th, US Special Presidential Envoy for Climate John Kerry visited China and issued the "US-China Joint Statement Addressing the Climate Crisis" jointly with China's special climate envoy Xie Zhenhua. US-China cooperation, which was disrupted during the Trump era, has swung back into motion. Meanwhile, whether the bilateral cooperation on climate change will indeed make progress amid the worsening stand-off between the two countries must be watched.

The joint statement declared that: (1) Both countries intend to develop, by the time of COP26 hosted in Glasgow by the UK in November, their respective long-term strategies aimed at net-zero GHG emissions/carbon-neutrality; (2) both countries will strengthen climate action in the 2020s, including measures to decarbonize industry and power including through electricity storage and grid stability, CCUS, and green hydrogen, increase deployment of renewable energy, energy-efficient buildings, and green, low-carbon transportation; and (3) both countries intend to take appropriate actions to maximize international investment and finance in support of the transition from carbon-intensive fossil fuel based energy to green, low-carbon and renewable energy in developing countries. In terms of feasibility, for (1), China has been formulating a long-term strategy since 2019 in compliance with the Paris Agreement and therefore will submit one as promised. On the other hand, the US Biden administration was inaugurated just this year and may be unable to formulate a long-term strategy, and even if it can, may be unable to implement it. For (2), the US will not lift the blockade against China for technologies in which it has an advantage, and "will not let China win" (Mr. Biden, May 18) in the EV and other areas where China has a competitive advantage. Therefore, bilateral cooperation in decarbonizing this area may not make progress. Meanwhile, regarding (3), financing to help other countries to decarbonize has the most potential for progress as it involves few competitive factors and the US, China, and other countries can all benefit from such action.

Further, at the Climate Summit, President Xi did not accept President Biden's call for all major countries to ratchet up their emissions reduction targets. China already pledged in September 2020 to aim to reach peak CO₂ emissions before 2030 and achieve net-zero carbon emissions before 2060. On December 12, 2020, China announced an increase in its 2030 target (NDC), specifically, its CO₂ emissions per unit GDP (emission intensity), from 60–65% to at least 65% compared with 2005 levels, and the ratio of non-fossil energy in primary consumption from 20% to 25%. In contrast, the United States temporarily withdrew from the Paris Agreement and did not raise its target until the Summit held in its own country. China is proud of its promised ambitious increases in targets and may not see the point in raising the targets further at the request of the US, which is a laggard in climate action.

Thus, although cooperation in climate change may help stabilize relations between the US and China, its effectiveness remains unclear. Meanwhile, even if the US-China climate change cooperation does not make progress, China will continue with its decarbonization efforts. This is because net-zero carbon emissions are a critical national strategy decision that affects the sustainable development of the Chinese people and the common destiny of humankind. How cooperation with the US on climate change will actually proceed and how China will implement efforts to keep its own promises must continue to be watched.



4. ME: Major ME Countries Start Re-adjusting Relations

Shuji HOSAKA
Director of JIME Center

In early April, peace talks between Saudi Arabia and Iran began in Iraq's capital Baghdad, with Iraq serving as an intermediary. Saudi Arabia broke off ties with Iran in 2016 and the two countries have been at odds ever since. However, at the end of April, Saudi Crown Prince Muhammad bin Salman expressed his hope for better relations with Iran, softening the country's stance on Iran. Iran greatly welcomed this gesture and change in tone.

The shift in US policy toward the Middle East opened the way for Iran and the US to return to the Joint Comprehensive Plan of Action (JCPOA), and made the collapse of Iran's present administration unlikely. This forced Saudi Arabia to build sustainable ties with Iran. Further, the military clash with the anti-government Houthi militants in its southern neighbor, Yemen, is becoming a major economic and military burden for Saudi Arabia. Reaching a compromise with the Iran-backed Houthis by improving relations with Iran was perhaps also one of Saudi Arabia's objectives. However, Yemen is continuing to launch drone and ballistic missile attacks on Saudi Arabia.

Meanwhile, Turkey also made moves to improve relations with Saudi Arabia. The bilateral relationship had deteriorated after the murder of a Saudi journalist in Turkey in 2018. At the end of April, Ibrahim Kalin, top aide to the Turkish president, said that the Saudi court ruling on the case would be respected. For Turkey, which has always claimed Crown Prince Muhammad's involvement in the case, this was clearly a compromise. In May, President Erdogan talked to King Salman by phone, and subsequently, Turkish Foreign Minister Mevlüt Çavuşoğlu visited Saudi Arabia to start talks toward peace.

On April 25, US President Biden recognized the killing of Armenians by the Ottoman Empire during World War I as genocide with the aim of ethnic cleansing. This damaged relations between the US and Turkey, which has always denied that a genocide took place. Turkey is increasingly at odds with the West due to human rights and other issues, and has now shifted toward improving ties with neighboring countries, opening peace talks not only with Saudi Arabia but also with Egypt, with which it had clashed over Libya and the Muslim Brotherhood.

Meanwhile, at the end of April, fighting broke out in the Sheikh Jarrah District in the Old City of Jerusalem between Palestinians and Israeli police forces after Palestinian residents were forced from their homes. Conflict spread to other regions and led to rocket attacks on Israel by the Islamic group Hamas, which effectively rules the Gaza District. Israel launched retaliatory attacks, killing 232 Palestinians as of May 20. Arab nations, including the UAE and Bahrain, which have restored diplomatic ties with Israel, all immediately condemned Israel. The United Nations Security Council also met to discuss measures but failed to agree to take joint action. On May 20, Israel and Hamas announced they had agreed on a ceasefire starting the next day.



5. Russia: Deadlocked Confrontation between the Putin Administration and the West

Shoichi ITOH, Manager, Senior Analyst
Global Energy Group 2, Strategy Research Unit

On April 22, at the Leaders Summit on Climate hosted by US President Biden, President Putin said Russia, the world's fourth largest GHG emitter, is prepared to fulfill its international climate responsibility by significantly cutting its net GHG emissions by 2050, and is interested in strengthening international cooperation. The impact of global warming has become more serious in Russia too in recent years, as evidenced by forest fires in Siberia, more frequent flooding, and melting of the permafrost, which covers more than 60% of the land area. In the first half of 2020, the average national temperature hit the highest on record. In November of the same year, President Putin signed an executive order instructing relevant ministries to reduce GHG emissions by 30% from 1990 levels by 2030. However, as Russia maintains an energy policy of boosting natural gas production and exports and has yet to establish concrete GHG reduction measures, many experts on Russia are skeptical about the target.

On April 29, government opposition leader Alexei Navalny appeared in public, via a video link, for the first time since being imprisoned in February 2021, looking thin and drained. He criticized President Putin, whose popularity continues to fall, as a "naked king who wants to rule until the end." On the same day, leaders of his support group, which has been designated as an "extremist group" by Russian authorities, announced that the group will be dissolved. However, many consider that stronger crackdowns on critics will not calm the anti-Putin movement, which is now spreading nationwide, but actually do just the opposite.

Russia is causing yet deeper confrontation with the West as it rolls back democracy in the country and strengthens military pressure on Ukraine. In response to the ban imposed by Russia on April 30 prohibiting eight senior EU officials including President of the European Parliament David Sassoli from entering the country, on the same day, European Council President Charles Michel, European Commission President Ursula von der Leyen, and the President of the European Parliament issued a joint statement "condemning Russia in the strongest possible terms." Regarding the cyberattack by DarkSide, a Russian criminal hacking group, that brought the Colonial Pipeline in the US to a halt in early May, President Biden suggested on May 13 that the Russian government may not have been directly involved in the attack. However, the incident led to fierce criticism of Russia in the US Congress, public, and media. Meanwhile, on May 14, the Russian government designated the US as an "unfriendly state" that takes hostile actions against it, and announced strict restrictions on the number of staff at US embassies and consulates in Russia.

On May 20, the ministerial meeting of the Arctic Council was held in Reykjavik, the capital of Iceland. The meeting discussed sustainable development and environmental protection of the Arctic Sea, but also saw the US criticize Russia's military strategy in the Arctic. While actively developing resources and navigation routes in the Arctic Sea, Russia newly established the Northern Military District in January 2021 and is accelerating the construction of infrastructure that will increase the combat capacity of nuclear submarines that use the route. Developments in the Arctic must be watched from the perspective of US-Russia conflict, in addition to resource development and environmental protection.



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***IEEJ e-Newsletter* Editor: Yukari Yamashita, Managing Director**
***IEEJ j-Newsletter* Editor: Ken Koyama, Senior Managing Director**
The Institute of Energy Economics, Japan (IEEJ)
Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054, Japan
Tel: +81-3-5547-0211 Fax: +81-3-5547-0223



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